

7.0 COMPREHENSIVE DEVELOPMENT ANALYSIS AND RECOMMENDATIONS

Sections 4(e) and 10(a)(1) of the Federal Power Act (FPA) require that FERC give equal consideration to developmental and nondevelopmental uses of the waterway on which a project is located. When FERC reviews a hydroelectric power project, it equally considers recreation, fish and wildlife, and other nondevelopmental values of the project, as well as the project's developmental values in determining whether, and under what conditions, a hydroelectric power license should be issued. Equal consideration has been given in this PDEA to both developmental and nondevelopmental resources to determine which alternative is in the best interests of the public and best adapted to a comprehensive plan for improving or developing the waterway.

7.1 SUMMARY OF ENVIRONMENTAL AND DEVELOPMENTAL EFFECTS

In Chapter 5.0 the environmental and developmental effects of the No-Action Alternative, the Proposed Action, and Alternative 2 are described and evaluated. In this chapter, Table 7.1-1 summarizes and compares the alternatives and their primary effects on the major resources.

The ALP generated over 500 potential PM&E measures for consideration. In conducting the environmental evaluation, potential new environmental measures were weighed in terms of their effectiveness in meeting specific identified resource needs, their potential cost impact on the project, and their potential for adverse effects on continuing operations that currently meet a wide variety of public purposes under the SWP authorization. Water impounded behind Oroville Dam is released for a variety of beneficial uses. Environmental protection measures address instream flow requirements for the protection of aquatic resources, fish hatchery operations, and water quality requirements in the Sacramento–San Joaquin Delta (Delta). The Oroville Facilities also provide extensive recreation opportunities. Developmental measures include water supply, irrigation, and flood control operations. The power generated while making these releases is used to partially offset the cost of purchasing power on the open market for pumping and conveying water from Lake Oroville to SWP customers statewide. Roughly one-third of SWP power needs are supplied by the Oroville Facilities, and this greatly enhances the reliability and cost effectiveness of delivering SWP water supplies, and their associated benefits statewide. If the amount of power generated at the Oroville Facilities were reduced, DWR would need to rely on more expensive and less reliable power sources to replace project power, thus increasing project operating costs and potentially reducing reliability. This potential increase in operating costs would need to be passed on to SWP water customers through higher water rates statewide.

The following section provides an overview of how the environmental and developmental aspects of the project were balanced in arriving at the Applicant's preferred alternative, designated as the Proposed Action.

7.2 RECOMMENDED ALTERNATIVE

Based on a review and evaluation of the No-Action Alternative, the Proposed Action, and Alternative 2, the Proposed Action has been selected as the preferred alternative. This alternative is recommended because impacts of the project are addressed with appropriate protection and mitigation measures, enhancements, all recreational needs are met, and the net benefits of the Proposed Action outweigh the consequences associated with the other alternatives. Under the Proposed Action:

- Issuance of a new license would allow the Applicant to continue to operate the Oroville Facilities as a dependable source of electric energy;
- Continued operation of the 762-MW project would avoid the need for an equivalent amount of fossil fuel-fired electric generation and capacity, continuing to help conserve nonrenewable energy resources and reduce atmospheric pollution;
- Implementation of the recommended PM&E measures would protect or enhance fisheries resources, water quality, terrestrial resources, improve recreational resources, and protect historic and archaeological resources within the project area; and
- The Applicant would continue to meet mandated project purposes covered by a wide variety of federal and State statutes and other legal requirements, including water rights, water supply, flood control, and Delta salinity control, without adverse effects.

7.2.1 Existing Environmental and Recreation Measures that Would Continue

Under the Proposed Action, the Oroville Facilities would continue to be operated as they are now, but under the terms and conditions of a new FERC license specifying certain terms and conditions to further protect and enhance the environment. The existing project, which operates as a key component of the SWP, already offers substantial environmental and recreational benefits to the region while providing water to customers locally and throughout the State. Existing benefits are associated with: (1) water releases to meet a multitude of downstream needs including such measures as improvements to Delta water quality; (2) Feather River Fish Hatchery operations; (3) aquatic and terrestrial habitat management in the Low Flow Channel, the OWA, Lake Oroville, and Thermalito Afterbay; (4) recreation facilities and management programs; (5) environmental measures and monitoring programs that have been implemented by the Applicant over the years (including the existing water quality monitoring program and the "Interim Projects" implemented by DWR during relicensing as described in Chapter 3.0); and (6) a number of selected conservation measures recommended by

the U.S. Fish and Wildlife Service (USFWS) during development of the Draft terrestrial Biological Assessment (BA). The Oroville Facilities would continue to provide the following specific environmental and recreation-related benefits:

- One of the most diverse recreation experiences of any other similar sized reservoir, including power and non-power boating, camping, swimming, water skiing, hunting, angling, recreational vehicle (RV) use, hiking, biking, bird watching, equestrian use, and model airplane flying;
- One of the highest populations of anadromous fish in the Central Valley of California;
- A bass fishery in Lake Oroville widely acknowledged by anglers as world class;
- Significant migratory waterfowl habitat as part of the Pacific Flyway;
- The OWA, one of the most heavily visited State Wildlife Area in California;
- Non-motorized trails which are among the best developed and most popular within California's State Recreation Areas;
- Dedicated state-of-the-art equestrian camping facilities;
- Diverse and quality habitat for a number of special-status species including bald eagle, giant garter snake, valley elderberry longhorn beetle (VELB), and several species of fairy shrimp;
- The only fully self-contained, state-of-the-art floating campsites in the nation;
- A variety of no-fee recreation opportunities; and
- Excellent interpretive and educational opportunities at the Feather River Fish Hatchery and the Lake Oroville Visitors Center, as well as special event programs such as the Salmon Festival.

In addition to the above, numerous operating agreements are currently in place between the Applicant and other State and federal regulatory agencies, since the Oroville Facilities operate within the framework of the larger SWP. These agreements govern both project operations and water releases, and provide terms for protection of environmental resources. Due to these operating agreements, a large number of existing environmental measures that have been in place for many years would continue under the future project operation, and significant new PM&E measures would be implemented by the Applicant under the Proposed Action.

7.2.2 Proposed New PM&E Measures

Beneficial effects on the environment associated with the relicensing of the Oroville Facilities would result from both the above existing environmental measures that will

continue into the future and from new PM&E measures recommended for the protection and enhancement of natural resources and recreation opportunities in the project area. Key elements of the proposed new PM&E measures proposed under the Applicant's Proposal include the following actions:

Aquatic Resources

- Gravel Supplementation and Large Woody Debris Programs would be developed and implemented to increase the quantity and improve the quality of spawning habitat for salmonids, including federally listed spring-run Chinook salmon and steelhead in the Low Flow Channel.
- Fish barrier weirs and a salmon egg-taking station would be constructed and operated in the Low Flow Channel downstream of the Fish Barrier Dam to assist in recovery of species listed under the Federal Endangered Species Act (FESA).
- A Hatchery Adaptive Management Program would be developed to adaptively manage hatchery practices to respond to changing conditions.

Terrestrial Resources

- Procedures would be implemented to ensure that migratory and resident waterfowl brood ponds in Thermalito Afterbay retain sufficient water through recharge at 3-week intervals for the brooding period from approximately April 15 to June 30. In addition, four new brood ponds would be constructed to further enhance habitat.
- Improved terrestrial habitat would be provided through the development of approximately 60 acres of upland food enhancement to augment wintering nesting waterfowl and upland game bird food sources in the vicinity of Thermalito Afterbay. Approximately 240 acres of waterfowl nesting cover would also be developed and maintained annually within the Thermalito Afterbay portion of the OWA on a rotational basis and additional wood duck/wildlife nesting boxes would be installed and maintained in the OWA.
- An Invasive Species Management Plan would be developed and implemented to reduce noxious non-native plant populations and replace them with appropriate native plants.
- Additional Draft terrestrial BA conservation measures recommended by USFWS would be adopted to further protect federally listed threatened and endangered species, including measures to address giant garter snake habitat, bald eagle habitat, vernal pool-related species, the California red-legged frog, and the VELB.

Water Quality

- Water quality monitoring would continue throughout the project area and public health-related information would be provided regarding bacteria levels in swimming areas and health risk issues.

Recreation Resources

- A Draft Recreation Management Plan has been prepared by the Applicant (Appendix I) to address recreation needs and clarify the roles of key entities responsible for management, maintenance, and development of recreational resources within the project boundary. This plan will be finalized after issuance of a new FERC License. The draft plan addresses such subjects as continued operations and maintenance (O&M) at existing and new recreation sites, periodic recreation monitoring through the term of the new license, compliance with requirements of the Americans with Disabilities Act (ADA), implementation of a non-motorized trails program, and development of a projectwide Interpretation and Education Program.
- Improved ADA access for disabled visitors would be provided at several recreation sites: Bidwell Canyon Campground/Marina, the Loafer Creek Campground area, the Lime Saddle Marina, the Diversion Pool Day Use Area, and the South Thermalito Forebay Boat Ramp (BR) area.
- Boat launch access and/or capacity (including extensions of several boat ramps to provide enhanced low-water access) would be improved at several recreation sites: the Bidwell Canyon Boat Ramp, the Enterprise BR area, and the Diversion Pool at Lakeland Boulevard.
- Day use and picnic facilities would be added or expanded at Enterprise Boat Ramp Foreman Creek, the Diversion Pool, the South Thermalito Forebay, the Larkin Road Car-top BR, and the Thermalito Afterbay Outlet located within the OWA.
- Camping facilities would be added or expanded at the Loafer Creek Complex and the OWA Thermalito Afterbay Outlet.
- Swimming opportunities would be enhanced at the North Thermalito Forebay, the South Thermalito Forebay, and the Larkin Road Car-top BR.
- Trails would be added or expanded at the North and South Thermalito Forebay and Saddle Dam.
- Improved or expanded vehicle parking, interpretive information, and safety signage would be provided at various recreation sites.

Cultural Resources

- Many historic properties would be stabilized and/or protected and a Historic Properties Management Plan (HPMP) would be developed and implemented as directed under Section 106 of the National Historic Preservation Act.

Land Management and Aesthetics

- The storage area north of the Oroville Dam emergency spillway would be screened to improve aesthetics.

7.2.3 Benefits of the Proposed Action

Along with the existing benefits that the Oroville Facilities already provide, the additional PM&E measures included in the Proposed Action would directly or indirectly provide a much greater level of benefit. The Proposed Action includes numerous measures that would greatly enhance recreational use of the Oroville Facilities, as well as providing overwhelming benefits to the environment and natural resources. The Proposed Action would continue to result in additional off-site benefits related to water supply, power, flood control, and the local economy. Some of the benefits that would result from implementing the measures recommended in the Proposed Action include:

- More diverse and improved recreation opportunities for local and regional visitors to the project;
- A greater level of public education and interpretive programs for visitors to the project;
- Improved access for disabled visitors;
- Greater protection of historic and cultural resources;
- Enhanced coordination between the Licensee and local communities through establishment of a License Coordination Unit located in Oroville;
- Enhancement of warmwater fishery and coldwater fishery, thereby enhancing and maintaining the recreational angling experience;
- Enhancement of salmonid rearing and spawning habitat;
- Protection of vernal pool species and other sensitive terrestrial wildlife;
- Invasive plant species management;
- Continued provision of water for habitat and water quality enhancement in the San Francisco Bay/Delta;

- Improved public awareness about project water quality and related public health issues;
- Decision-making flexibility provided through the use of adaptive management strategies;
- Millions of dollars in economic benefits to the region from expenditures by recreational visitors, local employment, and expenditures for project O&M and construction of new PM&E measures;
- Enhanced resource management via improved coordination and communication between the Licensee and other responsible State resource agencies;
- Flood protection for property valued in excess of \$3 billion;
- 2.3 million MWh of electric power generated annually to enable reliable and affordable water supply deliveries throughout the State; and
- Continued supplemental water supply for diverse agricultural, municipal, and industrial users throughout the State.

7.2.4 Balancing of Developmental and Nondevelopmental Uses

The PM&E measures set forth in the Proposed Action would enhance or protect water quality and quantity, fisheries resources, terrestrial resources, recreation resources, cultural and historic properties, and other values associated with the Oroville Facilities. They are designed to work together collectively to minimize conflicts within and across the many different resource areas and project purposes. By comparison, the analysis of environmental effects supports a general finding that the additional PM&E measures analyzed under Alternative 2 are not warranted, since they either do not have a clear project nexus, would not represent the best balance of project resources, do not appear cost effective, or are not well supported by the study results. Some measures in Alternative 2, such as BLM land transfer and Fuel Load Management Plan, were not included because the necessary agency actions are beyond the control of the licensee. Further, most of the additional measures included in Alternative 2 are not preferred by the Applicant because they would either adversely affect operational flexibility or reduce future power output, which would ultimately increase the cost of water to SWP customers statewide. Alternative 2 does not represent the optimal development of this hydropower resource and is not in the best public interest. Specifically, selected PM&E measures in Alternative 2 are not supported for the following reasons:

Whitewater Park – The development and management of an off-stream whitewater park represents an economic development that is not appropriate for a hydropower Licensee. No need for such a facility was identified as other opportunities, both artificial (Reno whitewater park) and natural (North Fork Feather River), are available both locally and regionally. The preferred location could be a security risk, as it is in close proximity to critical project infrastructure. It would also require additional flows to be diverted from

the Feather River within the project area, resulting in potential adverse water quality effects and loss of power generation, while construction would result in the loss of habitat. It is unknown if the proposed site is technically or environmentally feasible.

Flexible Events Center – This facility would be primarily for equestrian special events due to its location at an enhanced equestrian staging area. No need for such a facility was identified in the Recreation Needs Analysis. As an Interim Project, the Thompson Flat group staging area was created to provide equestrian groups and others with a location similar to the existing equestrian staging area located on the opposite side of the Diversion Pool. The flexible events center would also result in additional habitat loss within the project boundary.

Campground Store Shell at Bidwell Canyon – No need for such a facility was identified in the Recreation Needs Analysis. A full-service store currently exists adjacent to the campground at the Bidwell Marina. Construction of a new facility would compete with this store and other private operations in close proximity to the campground.

Hatchery Water Sterilization – Hatchery water sterilization would provide minimal benefit to existing stocking programs and downstream fishery disease control; and disease does not appear to be a limiting factor in the river with regard to fishery health.

Low Flow Channel Seasonal Minimum Release Increase to 1200 cfs – Modeling results indicated no measurable benefit to water temperatures at Thermalito Afterbay agricultural diversions and that any benefit derived was dependent upon favorable meteorological conditions. This measure was not recommended due to the infrequent and marginal benefit as well as due to substantial power generation opportunity costs associated with it.

Shanghai Bench and Sunset Pumps Modifications for Sturgeon Passage – Although the Feather River is within the historical range of green sturgeon, extensive multi-year surveys during relicensing studies failed to find any sturgeon in the project area. Therefore, it would appear that this measure is unnecessary. Implementation of this measure could require significant and recurring channel modifications that could result in potential adverse effects on other aquatic species. Due to limitations on currently available scientific information on sturgeon swimming performance and fish passage behavior, considerable uncertainty exists regarding the potential success and risk of failure of this PM&E.

100% Hatchery Bred Salmon Marking Program – While this program could assist with the enforcement of angling regulations by providing easier differentiation between hatchery and wild fish, the value to overall regional salmonid recovery efforts would not be commensurate with the significant implementation costs. Benefits of this program to contribute to species recovery are dependent on third party actions, e.g. DFG fishing regulation changes that are outside of the Applicant's control.

Temporary Grandstand at Bidwell Canyon Boat Ramp – No need for such a facility was identified in the *Recreation Needs Analysis* (SP-R17) and this is not a preferred location

for bass tournament events. Fishing tournament organizers prefer to use the Spillway ramp facilities, which include low-water ramps, adequate parking, RV camping, and existing grandstands.

Whitewater Take-out – It is unlikely that any suitable sites exist for a take-out for the Big Bend run, as the shoreline around this area is very steep and no existing roads currently lead to the shoreline. Even if a new road is feasible, its construction would be unwarranted due to the relatively low use of this run, which is only available at low reservoir elevations and consequently is not runnable in most years.

The capital and O&M costs of implementing the proposed new PM&E measures set forth in the Proposed Action and Alternative 2 are substantial, and are additive to the significant costs associated with existing environmental measures already being undertaken by the Applicant. In comparing these two alternatives, the Proposed Action has been selected as the preferred alternative because it represents the optimal balance among environmental measures, capital and O&M costs, power production, SWP water supply deliveries and associated costs, operational flexibility, and the overall public interest.

As shown in Tables 6.2-2 and 6.2-3, the capital cost for PM&E measures associated with Alternative 2 would be over \$100 million more than those associated with the Proposed Action. In addition, the annual operating cost would increase by nearly \$3 million. Although many of the PM&E measures set forth in Alternative 2 were suggested by various stakeholders through the ALP process, the Applicant does not believe that the significant added costs associated with many of these PM&E measures are warranted in the broader public interest. For example, while the enhancement measure to create additional side channel habitat below the Fish Barrier Dam that was studied under Alternative 2 would increase the amount of habitat for spring-run Chinook and steelhead spawning and rearing, the added benefit is difficult to quantify, and the measure would require significant capital expenditures for construction, future O&M and monitoring, as well as power losses due to increasing minimum flows in the channel in order to make this new spawning habitat effective. Similarly, the estimated annual generation loss realized through the implementation of operational changes associated with Alternative 2 (i.e., increased flow releases to the Low Flow Channel, bypassing the Thermalito Pumping-Generating Plant), would be 11,000 MWh, costing approximately \$0.5 million per year yet the increase in minimum flow from 600 cfs to 800 cfs would only nominally increase fishery habitat.

In addition, development or expansion of selected recreation facilities associated with Alternative 2 would require significant expenditures of funds to address the interests of a few stakeholders. Examples of these include additional expenditures for location-specific improvements such as the Whitewater Park, flexible event center, and numerous others without nexus to the project. None of these additional enhancements were cited as needed in the *Recreation Needs Analysis* (SP-R17). Further, the Applicant considers development of these projects to be primarily driven by economic development goals related to regional tourism, and as such, if economically viable, it is better suited for private entities and not appropriate for development by the Applicant.

In considering PM&E measures that truly address the public interest over the long-term operation of the project under a new license, the significant capital expenditures planned under the Proposed Action all address the broader public interest, minimize cross-resource conflicts, and optimize the use of the Applicant's available funds. As any applicant has limited funds, lands, and resources, implementing unwarranted, marginal, or clearly inferior measures uses precious resources that could be better applied toward more beneficial measures in the future.

In general, the Proposed Action provides project improvements and PM&E measures that address the broadest public interest while generating more power at a lower cost over time. In addition to the loss of annual generation and resulting increased power costs, the added PM&E measures and changes in operation that would be implemented under Alternative 2 would cost over \$100 million in additional capital expenditures plus nearly \$3 million annually for O&M. This increase would exceed \$450 million over the 50-year license term, resulting in a significant increase in wholesale water supply costs to SWP contractors and their customers.

The Oroville Facilities ALP included thousands of hours of collaborative stakeholder meetings and the development and completion of 71 technical studies resulting in over 160 individual technical reports to support the development of alternatives and the evaluation of numerous PM&E measures. As a result of this exhaustive and inclusive effort, the Applicant strongly believes that the recommended Proposed Action appropriately balances the developmental and non-developmental aspects of the project and constitutes the best comprehensive plan for the waterway.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
PROJECT COSTS				
Average Annual Net Generation (MWh)	2,334,000 MWh	2,318,100 MWh (a 0.6% reduction from 2001 Existing Conditions)	2,318,100 MWh (same as the No-Action Alternative)	2,310,300 MWh (a 0.3% reduction from the Proposed Action)
Levelized Annual Cost of Power	\$53,542,000 (\$22.94/MWh)	\$54,088,000 (\$23.33/MWh)	\$61,799,000 (\$26.66/MWh)	\$71,783,000 (\$31.07/MWh)
Levelized Annual Cost of Environmental Measures	\$9,134,000	\$10,016,000	\$17,727,000	\$27,788,000
GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES				
Gravel Maintenance Flows	Current USACE flood management criteria define the storage capabilities and flood operations for the Oroville Facilities. High-flow releases are regulated by USACE guidelines, limiting the ability to provide regular, intermediate flushing flows.	Same as Existing Conditions.	Same as Existing Conditions.	Same as Existing Conditions.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Channel Morphology	Oroville Dam inhibits sediment and large woody debris transport from the reservoir area to the lower Feather River, affecting habitat complexity downstream of Oroville Dam. The 1983 agreement between DWR and DFG states that each year DFG will recommend to the licensee, for mutual agreement, a spawning substrate or gravel maintenance program.	Same as Existing Conditions.	Beneficial conditions associated with the Gravel Supplementation and Large Woody Debris Improvement Programs, and side channel enhancement to existing Moe's and Hatchery ditches	Same as Proposed Action plus additional benefit through creation of side channel habitat.
Lower Feather River Channel (downstream of Thermalito Afterbay Outlet) Geomorphic Function	Current USACE flood management criteria define the storage capabilities and flood operations for the Oroville Facilities. High-flow releases are regulated by USACE guidelines, limiting the ability to provide channel forming flows. Changes to the lower Feather River channel are limited by existing flood control levees, most of which were constructed prior to the Oroville Facilities.	Same as Existing Conditions.	Same as Existing Conditions.	Potential for increased short-term and localized channel erosion and incision associated with structural modifications for sturgeon passage and side channel creation.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
WATER QUANTITY				
Water Use	DWR provides water supply in accordance with existing terms and conditions of water right permits, SWP contracts, and Feather River Service Area (FRSA) agreements.	Same as Existing Conditions.	Same as Existing Conditions.	Same as Existing Conditions.
Surface Water Hydrology	DWR impounds precipitation and runoff, primarily winter flows, and releases water based on flood control criteria, fish and wildlife protections and enhancements, Bay/Delta water quality requirements, and water supply entitlements and contractual obligations.	Minor changes are expected in surface water hydrology at Lake Oroville, and in the Feather River downstream of the Thermalito Afterbay Outlet, due to modeled future increased “in-basin” demand. Under the Coordinated Operations Agreement (COA) the SWP and CVP operate jointly to meet Delta water quality requirements and other water demands within the Sacramento River basin. These requirements are referred to as “in-basin” demands.	Same as No-Action Alternative.	Increasing minimum flow in the Low Flow Channel, including seasonal increases for Thermalito Afterbay temperature control, provides additional surface flow to support the creation of additional side channel habitat.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
WATER QUALITY				
Water Temperature	<p>Water temperature objective at Robinson Riffle is less than 65 degrees between June and September. After September 15, water temperature should be suitable for fall-run Chinook salmon.</p> <p>1969 Agreement between Joint Water Districts and DWR to provide water for agricultural production.</p>	<p>Modeling results indicate a slight beneficial effect in the lower Feather River due to release pattern changes.</p>	<p>Same as No-Action Alternative.</p>	<p>Temperature targets are lower than existing conditions at Robinson Riffle, providing slight benefit to habitat in the Low Flow Channel. Slight increase in Thermalito Afterbay water temperature under certain meteorological conditions could benefit various water users.</p> <p>Some slight reduction in coldwater pool volume and slight reduction to water temperatures in the High Flow Channel at some times of year in some water years.</p>

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Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Recreation-Related Effects	<p>Lake Oroville and the Thermalito Complex impoundments have resulted in increased levels of recreation activities that have the potential to change water quality parameters such as suspended sediment, discharge of petroleum products, and increased nutrient concentrations. Oroville Dam impounds sediment that may contain elevated concentrations of metals as a result of historic mining practices, preventing further downstream dispersal. Fishing opportunities coupled with metal concentrations within the impounded sediments potentially expose the public to elevated contaminants in fish tissue. DWR, at the request of other public agencies, posts health hazard information associated with impaired water quality or fish consumption.</p>	<p>Same as Existing Conditions with minor increases in adverse recreation-related water quality effects as recreation use increases over time.</p>	<p>Same as No-Action Alternative with slightly greater potential to increase adverse effects because of higher levels of recreation use; however, all effects would still be minor. The Interpretation and Education (I&E) Program would provide beneficial informational material to enhance public awareness of potential risks associated with water contact and fish consumption from project waters.</p>	<p>Same as Proposed Action with the potential to increase adverse effects on water quality due to increased recreational use.</p>

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Other Effects	Current project operation and maintenance activities include the use of best management practices (BMPs) to limit the potential effects associated with localized short-term sedimentation resulting from erosion, petroleum discharges, pesticide use, and nutrient loading in project waters.	Same as Existing Conditions.	Same as Existing Conditions. Although additional construction may result from implementation of the Proposed Action, no adverse effects are expected as a result of continued implementation of BMPs.	Same as Proposed Action with additional adverse effects potential due to construction and operation of such additional facilities as the Whitewater Park.
AQUATIC RESOURCES				
Chinook Salmon Spawning Segregation	Spatial and temporal overlap of the spring-run and fall-run Chinook salmon spawning results in increased rates of redd superimposition and genetic introgression. Current hatchery operations provide some segregation through the selective timing of fish ladder use.	Same as Existing Conditions.	Increased spawning segregation and subsequent reduction of redd superimposition through the installation of the fish barrier weirs. Beneficial effects by reducing genetic introgression.	Same as Proposed Action.
Energy and Nutrient Passage	Blocked fish passage to upstream tributaries results in blockage of energy and nutrient transfer.	Same as Existing Conditions.	Same as Existing Conditions.	Same as Existing Conditions.

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Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Macroinvertebrate Populations	Macroinvertebrate assemblages found downstream of project facilities are less diverse than those sampled upstream. Armored substrates provide less surface area, while lower summer water temperatures may alter life-stage development synchronicity with other species. The reduction in flow variability downstream of the project likely benefits these species, which are highly susceptible to being flushed from their habitats by high flows.	Same as Existing Conditions.	Improved conditions associated with the Large Woody Debris and Gravel Supplementation and Improvement Programs, and side channel enhancement would increase species diversity.	Same as Proposed Action conditions plus additional benefit from new side channel creation for increased macro-invertebrate populations and habitat.
Woody Debris Recruitment	Oroville Dam traps large woody debris from the upstream tributaries and blocks the transport of these resources to the lower Feather River, thus reducing habitat quality and complexity.	Same as Existing Conditions.	Improved conditions associated with the Large Woody Debris Supplementation and Improvement Program.	Same as Proposed Action.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Gravel Recruitment	Lake Oroville traps gravel and sediment from the upstream tributaries and blocks the transport of these resources to the lower Feather River, resulting in continued poor substrate quality and streambed armoring downstream of Oroville Dam. The 1983 agreement between DWR and DFG states that each year DFG will recommend to the licensee, for mutual agreement, a spawning gravel maintenance program.	Same as Existing Conditions.	Beneficial effects from improved quantity and quality of salmonid spawning habitat from the Gravel Supplementation and Improvement Program.	Same as Proposed Action conditions.
Channel Complexity	Oroville Dam traps sediment and large woody debris transport from the reservoir area to the lower Feather River, provides static flows in the Low Flow Channel and moderates the flow regime in the High Flow Channel affecting habitat complexity and diversity downstream of Oroville Dam.	Same as Existing Conditions.	Slightly beneficial conditions associated with the Large Woody Debris Supplementation and Improvement Program and side channel enhancements to the existing Moe's and Hatchery ditches.	Same as Proposed Action conditions plus additional benefit from new side channel creation.

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Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Reservoir Fisheries	Lake Oroville is managed to promote a multi-species warmwater and coldwater fishery, benefiting a diverse angling community. The Lake Oroville coldwater fisheries for coho salmon and brown trout are sustained by hatchery stocking. DFG manages Thermalito Forebay as a put-and-take trout fishery to support recreational angling.	Same as Existing Conditions.	Same as Existing Conditions.	Same as Existing Conditions. Additionally, the reservoir fishery stocking program and downstream fishery would slightly benefit from water sterilization at the hatchery.
Lower Feather River Fish Species	Poor spawning gravel quality, minimal large woody debris cover, and decreased habitat complexity described above under "Woody Debris Recruitment" and "Gravel Recruitment" affects spawning and rearing success.	Continued degradation of spawning gravel, large woody debris cover, and habitat complexity.	Beneficial effects on lower Feather River fish species associated with the Hatchery Adaptive Management Program, Large Woody Debris Supplementation and Improvement Program, and Gravel Supplementation and Improvement Program.	Same as Proposed Action conditions plus additional beneficial effects on fall-run Chinook salmon associated with increased Low Flow Channel flows, decreased water temperatures, and new side channel habitat creation. Beneficial effects on green sturgeon (if present) associated with physical modification of potential passage impediments in the lower Feather River.

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Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
WILDLIFE RESOURCES AND HABITATS				
Wildlife Habitat	<ul style="list-style-type: none"> The project area provides a variety of terrestrial wildlife habitats. Project maintenance and recreational activities affect some freshwater emergent wetlands habitat. 	<ul style="list-style-type: none"> Slight improvement in montane hardwood conifer habitat due to implementation of Bald Eagle Management Plan. Beneficial effects will result from Implementation of the Vernal Pool Species Management Plan. 	<ul style="list-style-type: none"> Slightly adverse effects on blue oak/foothill pine and blue oak woodland habitats due to recreational developments. Beneficial effects on valley foothill riparian, montane hardwood conifer, and freshwater emergent wetland habitats associated with ESA protection of valley elderberry longhorn beetle habitat, bald eagle nesting habitat, and giant garter snake habitat. 	<ul style="list-style-type: none"> Same as Proposed Action conditions plus additional moderately adverse effects on blue oak/foothill pine and blue oak woodland habitats due to construction of the whitewater park and other recreation developments.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Wildlife Habitat (continued)	<ul style="list-style-type: none"> Oroville Dam traps sediment and large woody debris transport from the reservoir area to the lower Feather River, affecting habitat complexity and diversity downstream of Oroville Dam. 	<ul style="list-style-type: none"> Same as Existing Conditions. 	<ul style="list-style-type: none"> Beneficial effects on riverine habitat due to the Gravel and Large Woody Debris Supplementation and Improvement Programs. Slightly adverse effects on annual grassland habitat due to minor habitat modifications associated with waterfowl enhancements and additional recreational developments. 	<ul style="list-style-type: none"> Same as Proposed Action.
Lake Oroville Wildlife Species	Fish habitat enhancements and fish stocking actions beneficially affect piscivorous species.	<ul style="list-style-type: none"> No change from Existing Conditions for piscivorous species. Beneficial effect on montane hardwood conifer habitat due to implementation of Bald Eagle Management Plan. 	Same as No-Action Alternative.	Same as No-Action Alternative with additional adverse effects due to construction of the whitewater park and other recreation developments.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Feather River Wildlife Species	<ul style="list-style-type: none"> • Oroville Facilities operations affect downstream hydrology, which in turn adversely affect bank swallow nesting habitat, by altering erosion and sediment deposition along streambanks and inundating nest colonies. • Fisheries enhancement and stocking actions result in moderately beneficial effects on piscivorous species. 	Same as Existing Conditions.	Same as Existing Conditions plus adverse effect on western pond turtle due to fish barrier weirs restricting movement or causing take through drowning.	Same as Proposed Action.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Thermalito Complex Wildlife Species	<ul style="list-style-type: none"> Oroville project lands and waters in the project boundary provide forage for migratory and resident waterfowl. The waterfowl brood ponds have beneficial effects on migratory waterfowl and provide additional wetland habitat benefiting species such as giant garter snake. Project operations, maintenance, and recreation activities may affect vernal pool species and their habitat. High speed boating use and project water level fluctuations associated with the Thermalito Complex operation can affect nesting waterfowl. 	<ul style="list-style-type: none"> Same as Existing Conditions. Beneficial effects would result from Implementation of the Vernal Pool Species Management Plan. Same as Existing Conditions. 	<ul style="list-style-type: none"> Construction of additional waterfowl brood ponds would have increased beneficial effects on migratory waterfowl and provide additional wetland habitat benefiting species such as giant garter snake. Increased beneficial effects would result from Implementation of additional vernal pool protection measures. Same as Existing Conditions. 	Same as Proposed Action.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Oroville Wildlife Area Wildlife Species	<ul style="list-style-type: none"> Swainson's hawks utilize nesting and foraging habitat in the OWA. Migratory and resident waterfowl utilize nesting and foraging habitat in the OWA. 	Same as Existing Conditions.	<ul style="list-style-type: none"> Same as Existing Conditions. Additionally, beneficial effects on nesting and foraging waterfowl due to wildlife box program, and nest cover and foraging enhancements. 	Same as Proposed Action conditions.
FEDERALLY LISTED THREATENED AND ENDANGERED FISH SPECIES				
Spring-run Chinook Salmon and Steelhead	<ul style="list-style-type: none"> Spring-run Chinook salmon and steelhead have been affected by hydroelectric facilities constructed within the upper Feather River watershed leading to spawning superimposition downstream of the Oroville Facilities. Oroville Dam traps sediment and large woody debris transport from the reservoir area to the lower Feather River, affecting habitat complexity and diversity downstream of Oroville Dam. 	Same as Existing Conditions.	Beneficial effects on spring-run Chinook salmon and steelhead due to fish barrier weirs, the Hatchery Adaptive Management Program, and existing side channel enhancement. The Large Woody Debris and Gravel Supplementation and Improvement Programs would also benefit these species.	Same as Proposed Action. Additional beneficial effects associated with creation of new side channel habitat, increased quantity of spawning habitat from increased Low Flow Channel flows, and slight decrease in water temperatures.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
FEDERALLY LISTED THREATENED AND ENDANGERED WILDLIFE SPECIES				
Federally Listed Species and Habitats	<ul style="list-style-type: none"> Bald eagles utilize nesting and foraging habitats within and adjacent to the project boundary. Recreation activities in proximity to nest and forage areas could disrupt bald eagle nesting and rearing activity. Project lands provide habitat for giant garter snake. Project operations, maintenance, and recreation activities may affect vernal pool species and their habitat. Riparian habitat within project boundary include valley elderberry longhorn beetle habitat. Road and levee maintenance activities affect valley elderberry longhorn beetle habitat. 	<ul style="list-style-type: none"> Beneficial effect on nesting bald eagles due to implementation of nest territory management plans and other conservation measures. Beneficial effect on habitat for giant garter snake with continued activities to maintain existing brood ponds and to recharged the brood ponds at regular intervals. Beneficial effect on valley elderberry longhorn beetle due to implementation of conservation measures identified in the USFWS draft BA. 	<ul style="list-style-type: none"> Same as No-Action. Increased beneficial effects on giant garter snake, with construction of additional brood ponds and other measures identified in the USFWS draft BA. Increased beneficial effects on the valley elderberry longhorn beetle and vernal pool fairy and tadpole shrimp due to implementation of conservation measures identified in the USFWS draft BA. 	Same as Proposed Action.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
LAND USE				
Land Use and Management	Several public agencies manage lands independently within the FERC project boundary. DWR operation of the Oroville Facilities does not alter other public agencies' ability to manage lands within their jurisdiction; however, management plans specific to ESA species require periodic adjustment to recreation activities and access.	Same as Existing Conditions.	Moderately beneficial effects from improved interagency recreation management, recreation facilities enhancements and additions, and construction of four additional brood ponds.	Same as Proposed Action. In addition, beneficial effects would occur through the coordinated development and implementation of a Fuel Load Management Plan.
Land Ownership and Management Entities	In addition to the State, the USFS and BLM own property within the FERC project boundary.	Same as Existing Conditions.	Same as Existing Conditions.	The transfer of BLM lands within the FERC boundary to DWR is expected to have a beneficial effect on coordinated land management activities within the project boundary.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Agricultural Resources	<ul style="list-style-type: none"> • The Oroville Facilities provide reliable water supply for FRSA and SWP contractors for municipal and agriculture activities. Diversion canals within the FRSA contribute to non-native invasive weed species transfer. • Agricultural water withdrawals are made directly from Thermalito Afterbay at several points. Water temperature for these diversions varies with Oroville Facilities release water temperatures, meteorological conditions and afterbay residence time. 	Same as Existing Conditions.	Slightly beneficial effect on agricultural weed control due to Invasive Species Management Plan.	<ul style="list-style-type: none"> • Same as Proposed Action. • Additionally, potential slight benefit from May to mid-June under certain meteorological conditions due to some warming of water temperature released at agricultural diversions with increased residence time within Thermalito Afterbay.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Public Health and Safety	<ul style="list-style-type: none"> Numerous public safety entities share responsibilities for law enforcement and the provision of other public health and safety-related services at the Oroville Facilities. DWR provides financial support to the local mosquito abatement district. Wildfires caused by human activity occur within the project boundary. 	<ul style="list-style-type: none"> Same as Existing Conditions. Potential adverse effects on fire suppression from increased fuel loads. 	Same as Existing Conditions. Additionally, beneficial effect from improved coordination among all law enforcement and safety entities with management responsibilities within the project area.	Same as Proposed Action conditions. Additionally, beneficial effect associated with development of a coordinated Fuel Load Management Plan.
CULTURAL RESOURCES				
Cultural Sites Within/Near the Fluctuation Zone	Erosion and cyclical water level fluctuations affect archaeological resources and periodically limit access to culturally important locations.	Same as Existing Conditions.	Beneficial effects on archaeological and Ethnographic/Ethnohistoric resources would result through the implementation of an HPMP.	Same as Proposed Action.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Operations and Maintenance Activities	<ul style="list-style-type: none"> Large woody debris is collected and removed at McCabe Creek which may adversely affect cultural resources. Prior to O&M activities, surveys are conducted to determine potential effects on cultural resources. 	<ul style="list-style-type: none"> Adverse effects on cultural resources from woody debris removal would continue as well as potential effects from the installation of warmwater fishery habitat enhancements in Lake Oroville. Beneficial effects on archaeological and ethnographic/ethnohistoric resources would occur in association with biological enhancements that would further restrict recreation activities. Historical Oroville Facilities structures could be adversely affected by maintenance, repairs, and replacement. Same as Existing Conditions. 	Beneficial effects on archaeological and ethnographic/ethnohistoric resources, and historic structures would occur with implementation of an HPMP and related cultural resources PM&E measures.	Same as Proposed Action.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Public Access to Fluctuation Zone	The fluctuation zone is accessible to the public during low reservoir water levels. Off-road motorized vehicle and pedestrian use occurs within the periodically exposed inundation zone.	Adverse effects on cultural resources from looting and vandalism are expected to continue through unauthorized public activity.	Potential adverse effects due to increased public use; however, beneficial effects are expected with implementation of the HPMP and appropriate access restrictions.	Same as Proposed Action.
Interpretation and Education	DPR develops and implements an I&E Program.	Same as Existing Conditions.	Beneficial effects on archaeological resources would occur as a result of the expanded site stewardship program, Curation Facility and expanded I&E Program.	Same as Proposed Action conditions plus slightly beneficial effects through funding of the Site Stewardship Program and the relocation of mortar cupules to an appropriate location.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
RECREATION				
Boating	Motorized and non-motorized boating opportunities occur on project waters. Numerous launching ramps and support facilities are provided at Lake Oroville and the Thermalito Complex.	Same as Existing Conditions including Interim Projects constructed prior to 2005.	Same as Existing Conditions plus beneficial effects would result with improved access for all users, facilitated launching and related safety improvements, increased usability of ramps/docks, and improved boating information. Short-term adverse effects may occur during construction of various recreation facilities. With enforcement of 5 MPH boat speed limit in Thermalito Afterbay north of Hwy 162, slightly beneficial to non-motorized boaters and slightly adverse to motorized boaters.	Same as Proposed Action with additional beneficial effects occurring with increased whitewater boating opportunities, parking, and additional low water access at Lake Oroville. Additional short term adverse effects may occur during construction of additional facilities. Construction of a whitewater park would provide enhanced recreation opportunities for whitewater boaters; however, it would result in additional short-term adverse effects due to construction and long-term adverse effects on other resources.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Camping	Widespread and varied forms of camping opportunities are available within the project boundary including: floating campsites, group and equestrian campsites, boat-in, tent, primitive, and RV camping.	Same as Existing Conditions including Interim Projects constructed prior to 2005.	Beneficial effects would result from improved access for all users, increased campsite capacity, opportunities for new camping experiences, and overall improvement to facilities. Short-term adverse effects would occur during construction of various recreation facilities. Slight adverse effects on Boat-in Campsites from periodic restricted access.	Same as Proposed Action with additional beneficial effects resulting from enhanced campground facilities, increased parking, and additional floating campsites.
Angling	Various cold and warmwater angling opportunities occur on project waters. Numerous day use facilities, fish cleaning stations and ADA accessible fishing piers are provided within the project boundary. Fish stocking in Lake Oroville and Thermalito Forebay, habitat enhancement programs, and the hatchery support angling opportunities.	Same as Existing Conditions.	Beneficial effects would result from improved access for all users, expanded and enhanced angling opportunities, enhanced fish habitat. Some reductions in angling opportunities would be associated with 'no fishing zones' adjacent to the fish barrier weirs.	Same as Proposed Action with additional beneficial effects resulting from improved low water access and new shoreline day use area. Adverse effects due to increased fishing restrictions expected with increased ESA habitat.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Trail Use	Numerous trails for non-motorized use are located within the project boundary and provide recreation opportunities for hikers, equestrians, and bicyclists. All trails are open to hikers. Some trails allow horses/stock or bicycle use. Restricted use designation on some trails limits opportunities to other user groups.	Same as Existing Conditions including Interim Projects constructed prior to 2005.	Beneficial effects would result from increased recreational access, new trail opportunities, enhanced trails experiences, and potential resolution of user conflicts as described in the RMP Trails Program. Short-term minor adverse effects would occur during construction of trails.	Same as Proposed Action. In addition, slightly beneficial effects on a broader spectrum of users, due to increased multi-use trail designation and new trail construction.
Swimming and Other Shoreline-based Day Use	Numerous swimming and other day use facilities are located within the project boundary. Shoreline-based day use facilities include picnic areas, shade ramadas, and restrooms.	Same as Existing Conditions including Interim Projects constructed prior to 2005.	Beneficial effects would result from improved access for all users, enhanced day use experiences, new day use activities, improvements to existing facilities, and additional picnic sites. Enhanced warmwater swimming opportunities would improve the day use experience. Short-term adverse effects would occur during construction of various recreation facilities.	Same as Proposed Action. Additional beneficial effects with expanded swimming opportunities and facilities, enhanced day use facilities, and new shoreline access.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Public Information, Education, and Interpretation Services	Numerous interpretive and educational programs and signage exist within the project boundary. Including tours and programs at the hatchery and the Lake Oroville Visitor Center.	Same as Existing Conditions including Interim Projects constructed prior to 2005.	Beneficial effects are expected from enhanced public information, education, signage, and interpretation services and facilities as included in the RMP I&E Program.	Same as Proposed Action. Beneficial effects with the development of a spawning riffle observation access near the fish hatchery. Short-term adverse effects would occur during construction of this trail.
Special Events	A variety of special events, including fishing tournaments, equestrian trail rides, the Salmon Festival, and holiday celebrations occur within the project boundary.	Same as Existing Conditions including Interim Projects constructed prior to 2005.	Same as No-Action Alternative.	Recreation experience should increase in quality based on facilities constructed to support special events. Long-term adverse effects on wildlife and habitat due to permanent support facilities. Short-term adverse effects would occur during construction.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Safety	Several entities provide law enforcement and public safety services within the project boundary. DWR also coordinates with FERC and other agencies related to facility security.	Same as Existing Conditions including Interim Projects constructed prior to 2005.	Beneficial effects for visitor safety would occur as a result of development of a Wildland Fire Evacuation Plan, debris management at recreation facilities, and implementation of safety-related I&E actions. Large Woody Debris Supplementation Program in the lower Feather River could cause some boating and swimming safety hazards, but LWD Program will be implemented in a way to reduce risks.	Same as Proposed Action Conditions. Additionally, adverse effects may occur as a result of recreational enhancements located in close proximity to sensitive project facilities.
Recreation Management	In coordination with DWR, DPR, DFG, and the California Department of Boating and Waterways (DBW) have statutory or contractual responsibilities for recreation management within the project boundary. Other federal and State agencies have lesser roles in recreation management activities.	Same as Existing Conditions.	Implementation of the RMP and clarification of management roles would result in more efficient and effective recreation management.	Same as Proposed Action Conditions.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
Recreation Operations and Maintenance	In coordination with DWR, DPR, DFG, and DBW have statutory or contractual responsibilities for recreation facilities operations and maintenance within the project boundary.	Same as Existing Conditions.	The recreation monitoring program and continued O&M at existing and new recreation sites as described in the Draft RMP would result in overall enhanced recreation opportunities.	Same as Proposed Action Conditions with additional beneficial effects due to increased maintenance activities at dispersed locations.
Project Facilities and Operational Effects on Recreation	The project facilities provide a wide array of land and water-based recreation opportunities. Normal operation of the project facilities results in variable water levels in project waters. The variability creates both beneficial and adverse effects on various recreational users.	Same as Existing Conditions. Additionally, minor beneficial and adverse effects could occur due to nominally increased fluctuations in Lake Oroville water surface elevations. These fluctuations may result from increased “in-basin” water demands under the modeled 2020 level of development.	Same as No-Action Alternative.	Same as No-Action Alternative.
AESTHETIC ENVIRONMENT				
Project Facilities	The project facilities provide a wide array of landscapes and features within the project boundary.	Same as Existing Conditions.	Most of the improvements and measures associated with the Proposed Action would have beneficial effects with regard to aesthetic values. Temporary moderately adverse effects would result during construction of some facilities.	Same as Proposed Action with additional modifications on the landscape associated with increased level of enhancement.

Table 7.1-1. Summary of potential effects on resource areas.

Resource	Existing Conditions	No-Action Alternative	Proposed Action	Alternative 2
SOCIOECONOMICS AND RELATED RESOURCES				
Local Economic Activity and Fiscal Resources	The Oroville Facilities create an opportunity for recreation and visitor spending as well as local procurement of goods and services for existing operation and maintenance of the project. The project contributes to regional income and employment opportunities related to visitor spending and O&M expenditures.	Same as Existing Conditions with additional visitor spending and employment opportunities attributed to increased population and recreation use.	Same as Existing Conditions with additional beneficial effects from increased income, employment, and expenditures resulting from the implementation and use of recreation enhancements.	Same as Proposed Action with the potential to marginally increase income and employment with construction of additional recreation facilities.
Population and Growth-Inducing Effects	The project facilities and recreation opportunities indirectly support minor local population growth.	Same as Existing Conditions.	Same as Existing Conditions.	Same as Existing Conditions.
Public Services	The project facilities provide additional law enforcement services within the project boundary to supplement regional entities with public service responsibilities.	Recreation visitation would slightly increase demands on local service providers.	Recreation activity associated with the Proposed Action would slightly increase public service demands from No-Action conditions.	Same as Proposed Action.
Environmental Justice	The Oroville Facilities provide non-fee recreational opportunities and access to some project facilities.	Same as Existing Conditions.	Same as Existing Conditions.	Same as Existing Conditions.

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